## Abstract

A miniature PMDC motor has a wound rotor 15 comprising a rotor core 16 and a commutator 17 mounted on a shaft 14. A cooling fan 20 is directly mounted onto the commutator 17 by use of a mechanical snap-fit type connection. Projections 29 on the commutator mate with recesses in the fan 20 to prevent relative rotational movement and detents including resilient fingers 23 and projection surfaces 34 hold the fan axially.

10 Fig. 2